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(54) MOUNTING METHOD OF SEMICONDUCTOR ELEMENT

(57) Abstract:

PURPOSE: To harden an anisotropically conductive film and to mount a plurality of semiconductor elements on a substrate by a method wherein, after the plurality of semiconductor elements have been bonded temporarily on the substrate via the anisotropically conductive film, the plurality of semiconductor elements are heated and pressurized collectively.

CONSTITUTION: A suction nozzle 23 on one side protrudes to the downward direction; a bump 3 on a semiconductor element 1 is brought into contact with an anisotropically conductive film 7 which has been pasted on an interconnection pattern 6; and suction power is released. Then, since the surface of the anisotropically conductive film 7 is provided with adhesive power, the semiconductor element 1 is bonded temporarily to a substrate 5. The substrate 5 which has finished its temporarily bonding process is conveyed to a bonding stage 11 by using a substrate conveyance device 12; it is positioned. A bonding head 25 is driven downward in a state that the temperature at its lower-end part is kept at 190°C; it presses many semiconductor elements 1,... in the direction of the substrate 5 at a definite pressure. The anisotropically conductive film 7 is hardened in a state that the bump 3 and the wiring pattern 6 are connected electrically. Thereby, the operating process of the title mounting method is simplified, and the throughput of the mounting method can be increased.